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# The Future of Non-Strategic Nuclear Forces

Are These Capabilities Still Needed? (U)

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# **The Future Of Non-Strategic Nuclear Forces**

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**Joseph S. Howard II**

**Edward I. Whitted**

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April 30, 1991

## **The Future Of Non-Strategic Nuclear Forces**

### **Are These Capabilities Still Needed? (U)**

by

Joseph S. Howard II  
Edward I. Whitted

#### **ABSTRACT (U)**

The epochal political events of 1989-1990 are greatly influencing US non-strategic nuclear forces (NSNF). NATO NSNF strategy is undergoing revision. The London Communique of July 6, 1990 is the harbinger of an intense debate upon future NATO nuclear roles and missions. The President's cancellation of the Follow-on-to-Lance missile (FOTL) and the offer of withdrawal of forward-deployed nuclear cannon projectiles to NATO indicate downward trends in future NSNF stockpiles.

This report, in the form of an executive summary and an annotated briefing, presents the results of a yearlong policy and systems analysis investigation. The authors examine plausible rationale, first principles, that govern the justification for future NSNF. They then assess the capabilities of reduced stockpiles during 1995-2000 wherein regional powers may possess nuclear arms. By configuring three nuclear scenarios in which US vital interests are at stake, the authors analyze the number of NSNF weapons to investigate "how much NSNF is enough?" They also examine implications to the US Army should downward trends in short-range nuclear forces continue.

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**EXECUTIVE SUMMARY**Background

The world has witnessed such revolutionary changes over the past 18 months that clearly a new era has started. In this context, the authors undertook a study in late 1989 with partial Army support that would assess future European short-range nuclear force (SNF) structures and target sets. The rapidity of the political changes in Europe and the Soviet Union at the early stages of the effort motivated broadening the study to include strike non-strategic nuclear forces (NSNF) in a worldwide context. Also, the nature of the evolving era indicated that a traditional target-based analysis would be sadly deficient without underlying policy and economic assessments. These assessments have led us to conclude that, even more than before, future stockpiles will not be determined strictly on the basis of threat target defeat. Stockpiles will be configured from a complex interaction of domestic and international politics, defense budgets, arms control treaties, and differing threat perceptions.

The events in Europe are also affecting US NSNF strategies for other theaters. The outcome of future Nuclear Weapons Requirements Studies (NWRS) from the nuclear CINCs may profoundly affect NSNF roles and missions of the services. Trends in late 1990 were moving toward a denuclearization of the Army in the sense that organic nuclear systems might be retired.

Therefore, this paper examines the 1995-2000 rationale, roles, and capabilities of US NSNF in light of the revolutionary changes in Europe, plausible future nuclear threats worldwide, and downward trends in NSNF due to economic and political pressures.

Policy Findings: Strong Reasons for NSNF

The strategy and policy reassessment of US NSNF identified strong rationale for a continued role:

- As a visible instrument of superpower status in an uncertain and unpredictable world
- As a deterrent to future non-superpower nuclear-capable adversaries in a proliferated world
- As a deterrent to regional Soviet or Russian aggression as long as resurgence or reconstitution remains feasible
- To provide stability and insurance in a post-CFE Europe through a small air-delivered, forward-deployed force

Because of European politics, US NSNF structure decisions must be broader than peacetime NATO strategies, policies, and constraints.

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**The old *raison d'etre* for US NSNF: the Soviet Threat**

1. Democracies and economies of Western Europe
2. The overriding threat: the Soviet Union
3. NATO was unable to provide sufficient conventional forces
4. Deployment of nuclear weapons to Europe created an extended deterrence umbrella for conventional force deficiencies

**Other US CINCs were also allocated  
NSNF for deterrence of the worldwide  
Soviet Threat**

Initially behind the deployment of US forward-based nuclear forces has been the threat of Soviet landpower, and subsequently the Soviets' own theater nuclear capabilities. The victory of the allies in the Second World War led to several unforeseen events: one was the raising of the Iron Curtain in the late 1940s through the subjection of Eastern European countries by the Soviet Union. The US, after fighting a war against totalitarianism, turned to a grand strategy of containment of Soviet imperialism. A free and prosperous Western Europe continued to be of utmost interest to the US; and therefore, the NATO alliance was formed to draw the line against further Soviet expansion. Unfortunately, the Soviet Union and its Warsaw Treaty Organization (WTO) alliance deployed forces far beyond those required for its own defense. Unable and unwilling to match the conventional force goals of the 1952 Lisbon Conference, the US deployed its first theater nuclear weapons for NATO in 1953.

Over the past 45 years, NATO nuclear doctrine has evolved from "massive retaliation" in MC 14/2, to "flexible response" in MC 14/3, then to the development of provisional political guidance (PPG) for initial and follow-on nuclear use, next to the Montebello modernization decisions, and now to the proposed "weapons of last resort" from last summer's London communique. But behind all of these declaratory doctrines and revisions, excepting the last, has been the massive Soviet threat.

The US strategy of extended deterrence, operative with the forward-deployment of US weapons and nuclear guarantees to the allies, has created a tension between the Europeans and the US. The presence of US weapons in Europe has been emphasized by the Europeans as a coupling to the US Central Strategic Forces. Hence, the specter of Armageddon must always reside in the calculus of the Soviet Union. Conversely to the US, the presence of theater nuclear weapons (now NSNF) gave an aura of credible response options before the ultimate response.

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**The presence of NSNF in Europe contributed to the long peace of 45 years**

These weapons helped to deter the Soviet Union from initiating nuclear coercion or overt aggression against the NATO alliance

This occurred in spite of, or perhaps because of:

Ambiguities in NATO declaratory policies such as Flexible Response

Difficulties in developing battlefield nuclear weapon doctrine and concepts

Questions in survivability of NATO main operating bases

Unclear or unfavorable results from NATO nuclear exercises and war games.

The sheer destructive power of NSNF made the cost of a general European war too high, too uncertain about the prospect of victory, Pyrrhic or otherwise. NSNF engendered cautious behavior.

We argue that the existence of theater nuclear weapons was a major factor for the past 45-year peace in Europe. Prior to the stabilizing effects of NATO, due in part to its nuclear weapons, the European continent had been the scene of several major wars and periods of crises, largely stemming from rampant nationalism. The bipolar Cold War stabilized Europe, and the mass destruction available from nuclear weapons made a European general war too horrible. The evidence of NSNF contributing to the long peace of the past 45 years is persuasive:

- The Soviets in their own writings admit to unfavorable "correlation of force ratios" when NATO nuclear weapons are factored in.
- The danger of NATO nuclear use is clearly evident in their doctrine and training exercises. Dispersion of their forces is a norm prior to quick massing at the point of decisiveness.
- The Soviets undertook their own huge development and deployment program to field theater weapons for every practical delivery means.

The strategies of NATO worked. They worked in spite of ambiguities in NATO declaratory policies; ambiguities necessitated by political constraints and public acceptability. A number of employment questions and apparent deficiencies arose over the years as witnessed by changes in NATO doctrine (MC 14/2 to MC 14/3), results from exercises, and in recurring debates on NATO modernization such as the two-track decision.

But it all worked to keep the peace. The US policy of extended deterrence within NATO's nuclear declaratory and operational strategies made the cost of aggression too high to Soviet leaders. These weapons engendered cautious behavior. The costs of a general war became much too high.

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**But Future Regional Threats dictate three NSNF  
Deterrent Rationales broader than European stability forces**

**War prevention and war termination where US vital  
interests are involved:**

- 2. A visible symbol of national power in an uncertain &  
unpredictable multipolar world**
- 3. A deterrent to future non-superpower nuclear-capable  
adversaries in a proliferated world**
- 4. A deterrent to regional Soviet or Russian aggression as  
long as resurgence or reconstitution remains feasible.**

**NSNF Roles**

- An incalculable risk to the threat(s)
- Appropriate & credible non-strategic nuclear options  
including capabilities for in-kind nuclear response
- Direct defense of endangered US forces

The first major rationale for NSNF derives from its contribution as a political instrument and an insurance policy for the superpower US. Although not often on center stage in a number of regional disputes or conflicts, NSNF availability in the wings has certainly played an important role in diplomatic interchanges and crises.

A future nuclear-proliferated world would present enormous challenges to US defense interests. Over ten nations possess the capabilities to obtain nuclear armaments in the next decade. Several of these nations maintain profoundly hostile relations to the US. As regional powers in their own right with significant conventional armaments, their addition of nuclear capability would raise grave risks to deployed US forces.

While the aggressive intentions of the Soviet Union towards Europe may have disappeared, their conventional and nuclear capabilities remain huge. While the short-warning scenarios are no longer credible, a future resurgent and mobilized Soviet Union remains feasible. While intentions can move towards amicability, they can subsequently be reversed upon change in leadership. The Soviet Union or the greater Russian Republic, should some republics become autonomous, may have future cause to counter US vital interests in critical regions such as Southwest Asia, despite present trusts.

Therefore, we are incredulous of US forces without NSNF to prevent war or to terminate war against hostile nuclear-armed states. The rationale for NSNF must rest upon its capabilities to deter a plausible resurgent Soviet Union, or any of several regional powers with potential nuclear capabilities. As NSNF kept the long peace in Europe because it engendered cautious behavior, so should NSNF be kept as an incalculable risk towards any nuclear state contemplating aggression.

The rationale for NSNF also involves the element of credibility: the NCA should have options other than central strategic forces for an appropriate response.

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**US NSNF structure issues and decisions should be broader than peacetime NATO strategies and policies**

European political imperatives unsupportive of NATO NSNF modernization  
(except for safety and security enhancements to air-delivered weapons)



NSNF rationales support some US nuclear capabilities kept up-to-date



CONUS-based NSNF, subject to US political and budgetary constraints,  
can then be streamlined to meet broader US NSNF military requirements

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This study points to an expansion of the US rationale for having NSNF. Their *raison d'être* has been to deter the massive Soviet threat to Western Europe. Now that this threat has been discounted by most policymakers, reasons for continued NSNF capabilities should be publicized. The US ought to forward deploy a relatively small stockpile of air-delivered munitions and DCAs as a hedge against uncertainty, but modernization for NATO likely will be foreclosed except for safety and security enhancements.

The rationales as a superpower instrument, to deter a resurgent Soviet Union, and to deter future nuclear capable regional powers in contingency operations require up-to-date NSNF capabilities. US decisions on force structures and issues must be broadened beyond the narrow confines of NATO acceptability to include worldwide US requirements. Decisions upon the character and composition of future CONUS-based NSNF will be subject to severe domestic political and budgetary constraints as is. NSNF ought not to be held captive to European concerns especially when they are not to be forward-deployed except in crises.

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### Rationale Findings

1. NSNF should remain a key element within US defense strategy
2. Rationale for existence is for broad worldwide contingencies
  - Visible instrument of national power in a multipolar world
  - Deterrence of future regional adversaries with nuclear capabilities
  - Deterrence of reconstituted Soviet theater threats
  - Forward-deployed force for stability in Europe
3. US NSNF structure issues and decisions should be broader than peacetime NATO strategies and policies
4. Reductions in strategic forces may strengthen rationale for NSNF

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NSNF, in summary, should continue in its important role towards keeping the peace. Their rationale must broaden from a NATO *raison d'être*, where a small force furnishes stability and insurance in Europe, to worldwide contingencies. These include the deterrence of a reconstituted Soviet Union and of future nuclear-capable regional threats. As a superpower, the US ought to maintain NSNF as a visible symbol in our relations within a multipolar world. Therefore, US NSNF structure issues and decisions should be made in the broad context of worldwide US strategies and policies. Reductions in strategic forces might strengthen the rationale for non-strategic nuclear systems.

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**Credible deterrence**

**necessitates *will* to employ nuclear weapons as  
expressed in declaratory strategies and roles,  
and effective military *capability***

Capability is assessed in this study  
by analyzing the effectiveness of  
arms control-restricted, policy-driven,  
and budgetary-constrained stockpiles  
against reduced target sets

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An axiom – the degree of nuclear deterrence relates directly to will and to capability. Declaratory strategies and roles ought to express national will in explicit terms that will deter potential adversaries. Capability ought to be visible, perceived as effective, and trained with in peacetime to ensure that no doubts are raised concerning its credibility during crises or armed conflicts.

For the post-Cold War era, the target sets reflect substantial reductions in type and numbers. The availability of two systems, the Air Force SRAM T and the Army W79 for the 8-in. howitzer, is questionable in light of ongoing arms control, policy, and budgetary debates. The capabilities analyses that follow incorporate these considerations.

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Based upon IC projections we assumed an upper bound of three future regional threats to analyze NSNF stockpiles

1. Reconstituted Soviet Union or greater Russian Federation

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- *Casus belli*: nuclear coercion; imperialistic; survival; or economic
- Reentry into Eastern Europe; invasion into SW Asia/ Middle East

2. Pacific basin, regional nuclear adversary, e.g., North Korea

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DOE  
6.2(a) LND

- *Casus belli*: nuclear coercion; invasion of South Korea

3. Middle East, regional nuclear adversary, e.g., federation of Iran and Iraq

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6.2(a)

- *Casus belli*: nuclear coercion; control of oil supplies; Arab federation to destroy Israel.

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Let us assume that the US would want to maintain an NSNF force for the rationale presented in Section II. This force should be configured to fulfill missions against a resurgent Soviet Union (or greater Russian federation) and against previously unnamed regional powers with incipient nuclear delivery means. Because the US has traditionally maintained conventional forces to fight in two directions -- across the Atlantic to Europe and towards the Middle East/Southwest Asia, and across the Pacific to the Far East --, we assume that future grand strategy will include the forces to undertake two contingency operations at the same time. And for insurance, the force should preserve the wherewithal in conventional and nuclear means to deter a reconstituted Soviet Union that might assist these regional powers.

Undoubtedly a reconstituted Soviet Union would drive US NSNF stockpile numbers (in addition to the forward-deployed nuclear weapons for peacetime stability in Europe). Their capabilities in NSNF remain almost awesome despite changing intentions and decreases in production of armaments. It is not necessary for our purposes to spell out the road to crisis or to war. It might be a future combination of nuclear coercion, renewed interest in East European domination, oil proclivities towards the Middle East, or others.

From lists of states that might have nuclear weapons and delivery platforms in the next ten years or so, we selected three states with intense animosities towards the US: North Korea, and a federation of Iraq and Iran. In the former case, the *casus belli* might be the reunification of the Korean peninsula under North Korean control. In the latter, the *casus belli* might be oil control, or a holy war to exterminate Israel. For either regional contingency, the opposing threat nuclear weapons would number less than a hundred.

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